

In the Claims:

1-54. (Canceled)

55. (Currently amended) A semiconductor thin film according to claim 126, wherein a height of each of said resulting micro-projections is about 20 nm or less.

56. (Currently amended) A semiconductor thin film according to claim 126, wherein a diameter of each of said resulting micro-projections is about 0.1 μm or less.

57. (Currently amended) A semiconductor thin film according to claim 126, wherein a radius of curvature of each of said resulting micro-projections is about 60 nm or more.

58. (Currently amended) A semiconductor thin film according to claim 53126, wherein a density of said resulting micro-projections is about 1×10^{10} pieces / cm^2 or less.

59. (Canceled)

60. (Canceled)

61. (Previously presented) A semiconductor thin film according to claim 126, wherein said single crystal thin film includes a polycrystalline semiconductor region.

62. (Previously presented) A semiconductor thin film according to claim 126, wherein said semiconductor thin film contains a single crystal region having a size of about $1 \times 10^{-8} \text{ cm}^2$ or more.

63. (Previously presented) A semiconductor thin film according to claim 126, wherein said single crystal thin film includes an amorphous semiconductor region.

64-125. (Canceled)

126. (Currently amended) A semiconductor thin film comprising:
an insulating base; and

a single crystal thin film having micro-projections formed on said insulating base by heat treating a polycrystalline thin film formed by heat treating an amorphous semiconductor thin film to form a, said polycrystalline thin film having polycrystalline grains aligned in an approximately a generally regular pattern forming initial micro-projections by uplift of some of said polycrystalline grains at a boundary position portion among at least three of said polycrystalline grains by collisions amongst the polycrystalline grains and by heat treating the polycrystalline thin film, at least a portion of said micro-projections of said single crystal thin film having resulting micro-projections formed on a basis of some being comprised of the initial micro-projections.

127. (Currently amended) A semiconductor thin film according to claim 126, wherein said resulting micro-projections are aligned in an approximately regular pattern.

128. (Previously presented) A semiconductor thin film according to claim 126, wherein a thickness of said semiconductor thin film is about 50 nm or less.

129. (Previously presented) A semiconductor thin film according to claim 126, wherein a size of each of said polycrystalline grains is between about 0.1 μm and about 4.0 μm .

130-181. (Canceled)

182. (Previously presented) A semiconductor thin film according to claim 126, wherein said single crystal thin film forms a top surface of the semiconductor thin film.